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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)).

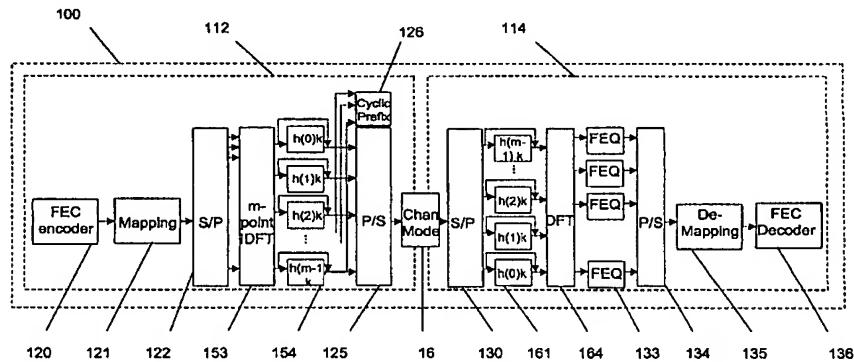
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(54) Title: POWER LINE COMMUNICATIONS DEVICE IN WHICH PHYSICAL COMMUNICATIONS PROTOCOL LAYER OPERATION IS DYNAMICALLY SELECTABLE



(57) Abstract: A power line communications ("PLC") transmitter and receiver device includes a physical communications protocol layer that provides for dynamic selection of a communications signal transmission operating mode from a plurality of such modes, where each has a corresponding transmission data structure that is based on characteristics of the electric power distribution network to which the PLC device is to be coupled and also the communications protocol profile requirements for the network.

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US04/43258

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC: H04B 1/38( 2006.01)

USPC: 375/222

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 375/222

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
ADSL books

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Google, Scirus, IEEE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20010028678 (KATO et al) 08 May 2001 (08.05.2001) figures 1-3 paragraphs [0001]-[0060]	1-7 and 11
Y		8-10
X	Lee et al. "HomePlug 1.0 powerline communication LANs - protocol description and performance results", International Journal of Communication Systems Volume 16, Issue 5, Date: June 2003, Pages: 447-473	1-7 and 11
Y	US 7,075,941 B2 (LIU et al) 01 March 2001 (01.03.2001) title abstract columns 1-50	8-10
Y	Rauschmayer, "ADSL/VDSL Principles", Macmillan Technical Publishing, 1999, page 171	1-11
Y	ITU "G.992.1 Recommendation", ITU, 06/1999, pages: 9-13;	1-11

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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## INTERNATIONAL SEARCH REPORT

International application No.  
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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Gardner "HomePlug Standard Brings Networking to the Home ", Communication Systems Design December 2000. Volume 6, Number 12	1-11
Y	US 20020006167 A1 (McFarland) 20 April 2001 (20.04.2001) paragraphs [0015]-[0054]	1-11
Y	US 5,909,463 A (JOHNSON et al) 04 November 1996 (04.11.1996) figures 1 and 2 columns 1-5	1-11
X	Lee et al. "HomePlug 1.0 powerline communication LANs - protocol description and performance results version 5.4", International Journal of Communication Systems, Date: 2000, Pages: 1-25	1-7 and 11
Y		8-10